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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,617	11/29/2001	Joseph Pugach		7397

7590

08/22/2003

William L. Kraye  
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EXAMINER

WRIGHT, WILLIAM G

ART UNIT

PAPER NUMBER

1754

DATE MAILED: 08/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/997,617

Applicant(s)

PUGACH ET AL.

Examiner

William G. Wright SR.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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Claims 1 and 12 are objected to because of the following informalities: Claims 1 and 12 claim the steps of a process using (a), (b), (d), (e), (f), (g) and (h). Did the applicants intend to leave out step (c)? Appropriate correction is required.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and

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potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103(a).

Claims 1-15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Falke et al. '787 or Falke et al. '217 each in view of Haruta et al. '327.

Falke '787 teaches a gold iron catalyst for oxidizing carbon monoxide. Carbon monoxide is taught to be found in a large number of industrial processes, at column 1 line 11 et seq. The teaching of a process temperature of below 100°C is found at column 3 line 8 et seq. It is taught at column 4 line 48 et seq. that for the instantly claimed type reaction the preferred catalysts are gold and iron. Grinding as a process parameter is taught at column 5 line 14 and in claim 9 line 38 et seq. The teaching of the inorganic iron salt being iron nitrate is found at column 6 line 29 et seq. The teaching of air (oxygen) and carbon monoxide as the gas being used is found at column 8 line 60 et seq. The catalyst particle size being below about 2 millimeters is found in claim 9 line 1 of column 12. Falke '217 teaches iron and gold catalysts for oxidizing carbon monoxide at column 1 line 7 et seq. The teaching of the using of iron nitrate is found in column 4 line 34 et seq. along with water being the preferred solvent. The temperatures at which the precipitation is conducted are taught at column 5 line 49 et seq.

Calcination is taught at column 6 line 1 et seq. and at claim 21.

The primary references each fail to teach the specific use of a claimed pH range and the claimed feature of gradually combining the precursor gold and iron solutions.

Haruta teaches the catalytic utility of oxidation catalyst at claim 1 line 10 and at column 7 line 40 et seq. The teaching of dropwise addition and a specific pH during the addition of these solutions is found at column 2 line 27 et seq. The claims also teach the pH range (claim 1), dropwise addition (claim 5), washing and heating at claim 12.

A practitioner would be motivated by the teachings of Haruta using a similar catalyst for a similar utility made by a similar method to combine the pH and solution addition features of Haruta with each primary reference. Falke '787 teaches at column 5 the particulars of the solution addition to include the use of a base and various methods of applying the solutions to each other and to the support. Falke '217 teaches at columns 4 and 5 the particulars of the solution addition to include application in succession, the use of a base and various methods of solution addition. It would be obvious to combine the features found in Haruta with the motivation to combine the solutions in various ways with base addition provided in the primary reference to Falke.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to William G. Wright, Sr. whose telephone number is (703) 305-7792. The examiner can normally be reached on Monday through Thursday from 6:30 A.M. to 5:00 P.M.

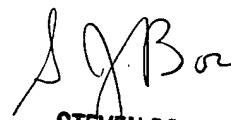
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on (703) 308-3837. The fax phone number for the organization where this application or proceeding is assigned are (703) 872-9306 for the regular communications and (703) 872-9311 for after final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1495.

WGW

W. G. Wright, Sr.:cdc

August 19, 2003

  
STEVEN BOS  
PRIMARY EXAMINER  
GROUP 1100